

In the Claims

Please amend the claims as follows:

1. (Currently amended) A method for adjusting data modulation at a base station comprising:

receiving data from a higher layer ARQ mechanism at a transmitter for transmission;

formatting the received data into packets for transmission, each packet having a particular type of encoding/data modulation;

appending the error check sequences;

providing a physical layer ARQ mechanism performing steps including:

transmitting the packets;

storing the packets for retransmission in a buffer memory incorporated into the transmitter;

monitoring a return channel for receipt of an acknowledgment for each packet that the packet has been received;

limiting the number of retransmissions to an operator-defined integer value;

clearing the buffer memory after the integer value is reached; and

retransmitting [[a]] an original or selectively modified packet at the transmitter, if an acknowledgment for that packet has not been received;

wherein the physical layer ARQ mechanism operates transparently with respect to the higher layer ARQ mechanism.

2. (Original) The method of claim 1 wherein the particular type of encoding/data modulation is forward error correction (FEC).

3. (Original) The method of claim 2 wherein the packets are transmitted using an orthogonal frequency division multiple access (OFDMA) air interface and the particular FEC encoding/data modulation adjusting is performed in addition to selective nulling of subchannels in an OFDMA set.

4. (Original) The method of claim 1 wherein the packets are transmitted using a single carrier having a frequency domain equalization (SC-FDE) air interface.

5. (Original) The method of claim 1 wherein the return channel is the fast feedback channel when the packets are transmitted using a code division multiple access (CDMA) air interface.

6. (Original) The method of claim 1 further comprising:

identifying a packet as having an unacceptable error rate responsive to receipt of a negative acknowledgment.

7 - 9. (Canceled).

10. (Previously presented) The method of claim 1 wherein the physical layer ARQ mechanism reduces retransmissions required by the higher layer ARQ mechanism.

11. (New) A method for adjusting data modulation at a base station in orthogonal frequency division multiple access (OFDMA) system, the method comprising:

receiving data from a higher layer ARQ mechanism at a transmitter for transmission;

formatting the received data into packets for transmission, each packet having a particular type of encoding/data modulation;

appending the error check sequences;

providing a physical layer ARQ mechanism performing steps including:

transmitting the packets;

storing the packets for retransmission in a buffer memory incorporated into the transmitter;

monitoring a return channel for receipt of an acknowledgment for each packet that the packet has been received;

limiting the number of retransmissions to an operator-defined integer value;

clearing the buffer memory after the integer value is reached;

varying subchannels used for transmitting the packets; and

retransmitting selectively modified packets at the transmitter, if an acknowledgment for that packet has not been received; wherein the physical layer ARQ mechanism operates transparently with respect to the higher layer ARQ mechanism.